

IN THE CLAIMS:

Please amend claims 1-6, 8, 10, 11, 19-21, 23, 24, 26-29, 31, and 32, and add claims 35-39. The addition of claims 35-39 is to further protect the Applicant's invention. No new matter is added as a result of these amendments. Support for the changes may be found for instance on page 4, lines 13-14, and throughout the application as originally filed. Claims 1-39 are pending following this amendment with claims 33 and 34 withdrawn from consideration. Claims 1-6, 8, 10, 11, 20, 21, 24, 27-29, 31, 32, and 35-39 are provided in a clean format in accordance with 37 C.F.R. § 1.121. A marked-up copy of the amended claims is provided in Appendix A. For the Examiner's convenience, Appendix A also includes all the remaining claims in the application.

1. (Twice Amended) A method of providing a polypeptide preparation having a content of undesired enzymatic side activities at such a level that they do not restrict the applicability of said polypeptide preparation for its intended purpose, the method comprising the steps of:

(i) providing a medium having a pH of 2.0 or higher that comprises at least one desired polypeptide having an enzymatic activity and in addition at least one undesired enzymatic side activity, and

B1 (ii) subjecting said medium to a pH of less than 2.0 for a period of time that is sufficient to at least partially inactivate said at least one undesired enzymatic side activity.

2. (Amended) A method according to claim 1, wherein at least 75% of the enzymatic activity of said at least one desired polypeptide is retained after subjecting said medium having a pH of 2.0 or more to a pH of less than 2.0.

3. (Amended) A method of claim 2, wherein at least 85% of the enzymatic activity of said at least one desired polypeptide is retained.

4. (Twice Amended) A method according to claim 1, wherein at least 50% of said at least one undesired enzymatic side activity is inactivated.

5. (Amended) A method according to claim 4, wherein at least 90% of said at least one undesired enzymatic side activity is inactivated.

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6. (Amended) A method according to claim 1, wherein the medium having a pH of 2.0 or higher is a medium derived from the cultivation of an organism that during its cultivation produces said at least one desired polypeptide and said at least one undesired enzymatic side activity.

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8. (Amended) A method according to claim 1, wherein said at least one undesired enzymatic side activity is selected from the group consisting of glucoamylase activity, starch degrading enzyme activity, protease activity, peptidase activity, phosphatase activity, lipase activity, cellulase activity, lactase activity and hemicellulase activity.

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10. (Amended) A method according to claim 9, wherein the bacterial species is selected from the group consisting of a gram negative bacterial species and a gram positive species.

11. (Amended) A method according to claim 9, where the yeast species is selected from the group consisting of *Saccharomyces cerevisiae*, a methylotrophic yeast species and a *Kluveromyces* species.

19. (Amended) A method according to claim 1, wherein said at least one desired polypeptide has aspartic protease activity.

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20. (Amended) A method according to claim 19, wherein the medium having a pH of 2.0 or higher is a medium derived from the cultivation of a microorganism that during the cultivation produces an aspartic protease and said at least one undesired enzymatic side activity.

21. (Amended) A method according to claim 20, wherein the medium is derived from the cultivation of a microorganism that naturally produces the aspartic protease or from the

B4 cultivation of a recombinant microorganism that has an inserted gene expressing the aspartic protease.

23. (Amended) A method according to claim 22, wherein the aspartic protease is expressed as a fusion protein having, in addition to the aspartic protease activity, at least one undesired enzymatic side activity.

B5 24. (Amended) A method according to claim 23, wherein said at least one enzymatic side activity is starch degrading enzyme activity.

26. (Amended) A method according to claim 25, wherein said at least one undesired enzymatic side activity is selected from the group consisting of glucoamylase activity, lactase activity, starch degrading enzyme activity, protease activity, peptidase activity, phosphatase activity, lipase activity, cellulase activity and hemicellulase activity.

B6 27. (Twice Amended) A method according to claim 19, wherein the aspartic protease is derived from the group consisting of an animal aspartic protease, a plant aspartic protease and a microbial aspartic protease.

28. (Amended) A method according to claim 38, wherein the mammalian aspartic protease is selected from the group consisting of pro-chymosin, chymosin, pepsinogen and pepsin.

29. (Amended) A method according to claim 28, wherein the aspartic protease is derived from a mammalian species selected from the group consisting of a ruminant species, a *Camelidae* species, a porcine species, an *Equidae* species and a primate species.

B7 31. (Amended) A method according to any of claims 28-30 or 38, wherein the mammalian derived aspartic protease is a protease naturally produced in a mammalian species.

B 32. (Amended) A method according to claim 27, wherein the aspartic protease is derived from a naturally produced aspartic protease by the addition or deletion of one or more amino acids or substitution of one or more amino acids therein.

-- 35. (New) A method according to claim 10, wherein the bacterial species is selected from *E. coli* and *Bacillus*.

36. (New) A method according to claim 9, wherein the yeast species is selected from *Pichia pastoris* and *Kluyveromyces lactis*.

B 37. (New) A method according to claim 24, wherein said starch degrading enzyme activity is selected from amylase activity and glucoamylase activity.

38. (New) A method according to claim 27, wherein said animal aspartic protease is a mammalian aspartic protease.

39. (New) A method according to claim 29, wherein the *Camelidae* species is *Camelus dromedarius*.--

Remarks

In addition to the below remarks and arguments related to the Office Action, the Applicants have provided two declarations under 37 C.F.R. § 1.132 by Peter Budtz. One declaration addresses the rejections related to the 35 U.S.C. § 112 and the other addresses the rejections related to 35 U.S.C. § 103.

Summary of the Office Action

The title of the invention was objected to by the USPTO. Claims 1-32 were rejected under 35 U.S.C. § 112, 2nd ¶. Claims 1-32 were rejected under 35 U.S.C. § 112, 1st ¶. Claims 1-9, 12-22, 25-28 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Laustsen (U.S. Patent 6,080,564) in view of Larsen (WO 95/29999) and Heinsohn (U.S. Patent 5,215,908). Claims 10, 11, 23, 24, 29, 30, and 32 were rejected under 35 U.S.C. § 103(a) as